



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,244	06/25/2002	Jeffrey Lee Thompson	24-NS-06054	8427

23465 7590 12/03/2003

JOHN S. BEULICK
C/O ARMSTRONG TEASDALE, LLP
ONE METROPOLITAN SQUARE
SUITE 2600
ST LOUIS, MO 63102-2740

EXAMINER

BOCHNA, DAVID

ART UNIT PAPER NUMBER

3679

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,244

Applicant(s)

THOMPSON, JEFFREY LEE

Examiner

David E. Bochna

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 12-20 is/are allowed.
- 6) ☒ Claim(s) 7-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 7 is objected to because of the following informalities:

Claim 7, line 9, it is unclear if "a pipe section flange notch" is the same "at least one notch" recited in lines 2-3 of claim 7. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 0013259 in view of Chaix et al.

In regard to claim 7, Japanese Patent '259 discloses a coupling spring for coupling a first pipe section flange 2 to a second pipe section flange (see fig. 6), each flange comprising at least one notch (notch in 2 accepting 9), the spring ring comprising:

a body 8 having a first surface and an opposing second surface, the body comprising a main bore and a plurality of bolt bores (holes for 5) extending therethrough from the first surface through the opposing second surface, the main bore configured to receive a pipe section 1 therethrough, the bolt bore configured to receive a fastener 5 therethrough;

a plurality of pivot bearings 9 (see fig. 11, 12) extending from the first surface, each pivot bearing 9 configured to engage the pipe section flange notch. Japanese Patent '259 also discloses axially stressing the bolts 5 in order to hold the coupling together, but Japanese Patent

Art Unit: 3679

'259 does not disclose using a plurality of bolt bore seats coaxially aligned with the bolt bores.

Chaix et al. teaches providing a plurality of bolt bore seats 56, 58 coaxially aligned with bolt bores in order to center the bolts within the hole allowing only an axial load to be placed on the bolts, thereby eliminating a chance of bending (see col. 3, lines 25-30). Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the bores of Japanese Patent '259 to include bore seats, as taught by Chaix et al., so that the bolts are only axially stressed, thereby reducing the chance of bending.

In regard to claim 8, the spring ring 8 is substantially cylindrical.

In regard to claim 9, the plurality of pivot bearings 9 are equally spaced circumferentially around the spring ring first surface.

In regard to claim 10, the plurality of bolt bore seats 56, 58 are substantially spherical.

In regard to claim 11, further comprising a bolt 46 (of Chaix et al.) extending through each bolt bore, each bolt comprising at least one spherical bearing (bottom of 48) sized to mate with a bolt bore seat 56.

Allowable Subject Matter

4. Claims 1-6 and 12-20 are allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 7-11 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit 3679

Conclusion

6 Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Bochna whose telephone number is (703) 306-9040. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



David Bochna
Primary Examiner
Art Unit 3679
November 25, 2003